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Burma

Solid Wood Products

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Report Highlights:

Burma's official wood exports should remain at around 475,000 cubic meters. The industry in Burma is faced with over logging due to continued unchecked illicit trading in logs.

EXECUTIVE SUMMARY

Burma remains more than 50 percent forested and has sizeable stands of commercial hard woods due to a sound policy of sustainable forest management that has been in place since British times. While commercial extraction of teak and tropical hardwoods is controlled under Forest Department regulations and monitoring, population growth and the resulting demand for fuel wood and agricultural land are putting pressure on both the hardwood and other forested areas. Illegal logging of hardwoods has and continues to be a problem in border areas, but the largest threat to Burma's forest resources is encroachment by villagers seeking wood for fuel and land for crops.

Accurate and reliable statistics on forest area resources, production, consumption, and trade are somewhat difficult to obtain given the extent of illicit trade and insufficient government resources to adequately monitor the sector. Nevertheless, post forecasts that annual production (based on Burma's fiscal year of April/March) of teak logs in 2000/01 will continue to be around 475,000 cubic meters. Production of other hardwood logs will be approximately 1.5 million cubic meters. Lumber output over the same period will be about 35,000 cubic meters of teak and 240,000 cubic meters of other hardwoods.

Burma's export trade is dominated by logs. Exports of teak logs in calendar year 2000 will likely be similar to 1999, or about 247,000 cubic meters, while exports of other hardwood logs will likely be between 335,000 and 400,000 cubic meters. Production of lumber and other value-added products for domestic use or for export is hampered by the low level of the local processing sector.

The forestry sector is a good illustration of the constraints, both economic and policy, that Burma faces. Articulate and knowledgeable bureaucrats know what their problems are and have good ideas for resolving them. However, lack of resources, contradictory policies and programs between Ministries, and irresistible economic incentives often prevent these ideas from being implemented. The latter factor is a considerable problem for the forestry sector. Commercial extraction of tropical hardwoods, both officially and outside the system, are extremely profitable and an important earner of foreign exchange for the cash-strapped government. It is unlikely that the existing regulations, sound as they might be, can be completely effective in curbing illicit extraction. At the village level, the short-term economic benefits of gathering fuel wood or clearing land for crops simply overrule the longer-term benefits of reforestation or other environment-friendly land management techniques.

Review of Forest Resources

Area Forested/Location

Burma is a timber surplus country surrounded by timber-deficit countries, such as Thailand, People's Republic of China, India, and Bangladesh. According to the latest data released by the Ministry of Forestry, total forest cover area was 343,767 square kilometers, a decrease of 11 percent compared to the previous data of total forest cover area of 388,201 square kilometers, out of a total land area of 676,577 square kilometers. As a result of diverse climatic conditions, the forest flora of Burma ranges from sub- alpine forests in the north through thorn forests in Central Burma to tropical rain forests in the south.

Mixed deciduous forest is the most important type of commercial forest because Teak is the principal species. The main commercial non-teak hard woods are Gurjun (Dipterocarp us sp.), Taungthayet (Sinfonia) floribunda), Padauk (Pterocarpus sp.), Tamalan (Dalbergia sp.), Thanwin (Millettia pendula), Hnaw (Andina cordifolia), Sagawa (Michelia champaca), Taukkyan (Terminaliatomentosa), Yon (Anogeissus acuminata) and Pyinkado (Xylia dolabriformis).

Forest Cover Change

An assessment of the change in forest cover conducted in 1990 revealed that the actual forested area had decreased at an average annual rate of 220,000 hectares during a period of 14 years from 1975 to 1989. Shifting cultivation, agricultural encroachment and illicit cutting had primarily been responsible for the deforestation. Since there was no conduction of forest cover since 1999, Post speculates that the rate of forest cover decline accelerated after 1990 since some of the forest area has been taken up by the Ministry of Agriculture and Irrigation to increase the production of export potential crops such as rice and sugarcane. With the national drive to increase the rice acreage to 16 million acres in FY 2000/01 to 18 million acres in the near future, some of the encroached forest areas and paddy areas in the reserved forest areas are now included in the rice acreage statistic father decreasing the forest cover area to 343,767 acres from 388,201 acres as stated by the Ministry of Forestry. In addition, it is widely believed that logging in the border areas has been on the increase since the early 1990's.

Forest Types

a Tidal Beach	13,751 square kilo meters (4% of Forest Area)
b. Evergreen Forest	55,003 square kilo meters (16% of Forest Area)
c. Mixed Deciduous Forest	134,069 square kilo meters (39% of Forest Area)
d. Dry Forest	34,377 square kilo meters (10% of Forest Area)
e. Indaing Forest	17,188 square kilos meters (5% of Forest Area)
f. Hill and Temperate	89,379 square kilo meters (26% of Forest Area)
Evergreen Forest	

Total Forest Area 343,767 square kilo meters

Permanant Forest Estates are divided into four categories namely Reserved forest, Protected public forest and protected area system. There are 803 numbers of Reserve Forests, 16.4% of the

total land area, 76 number of Protected Public Forest with an area of 122,242 square kilo meters of Reserves and Protected Public Forest comprising 18.07 % of the total land area. There are 24 numbers of Protected area and 11,282 square kilo meters of Spatial Extent of Protected Areas comprising 1.67 of the total land areas.

Forest Products/Wood Products Sector

Extraction/Production

- Annual Allowable Cut (ACC.)

The Forest Resources Management system in Burma was started by the British in 1856 and the Selection System that was initiated by Sir Deitrich Brandis is still being adhered. It is an exploitation-cum-cultural system known as Myanmar Selection System (MSS).

Teak is generally girdled and then felled 3 years later. All other hardwoods are extracted without girdling. According to the Forest Department, the ACC. for teak has been fixed at 609,500 cubic meters since 1971, nevertheless in year 2000, ACC. for teak was reduced to 409,062 cubic meters, a decrease of 33% percent compared to 1971. Whereas ACC. for other hardwoods was increased to 3.2 million cubic meters, an increase of 33% compared to previous ACC. for other hard woods of 2.4 million cubic meters.

The selection cut is not only determined by the ACC. in tree number but also by sizes that vary with the species. With teak, the sizes are fixed generally at 7'6" measured at 4'6" from the ground for good teak forest and 6'6" for poorer types of forests. There are areas where exploitable size is fixed at 5'0" but only in a minority of cases depending on the quality of the forests.

Prior to extraction of logs from the forest, the extraction department of the Myanma Timber Enterprise and the Forest Department meet at least six months ahead of the production year and draw up a working plan. This meeting is the finalization of the forest areas and compartments from where the trees are to be felled.

-Extraction

Harvesting of timber, milling and trade in the forestry products is mainly done by the Myanma Timber Enterprise(MTE), an agency of the Ministry of Forestry. The development of woodbased value-added products and marketing of these products to international markets also falls within MTE's responsibilities.

The Extraction Department under MTE is responsible for harvesting and transportation of teak and non- teak hard wood logs from the forests to various delivery points. The Extraction department annually extracts roughly about 400,000 cubic meters of teak and about 1.4 million of cubic meters of non- teak hard woods, as well within the ACC. of 0.4 million cubic meters for teak and 3.2 million cubic meters for non-teak hard woods.

-Local Marketing and Milling

The local marketing and milling are done by the local marketing and milling department of the MTE, which process the logs into lumber for distribution in the domestic market. The annual distribution in the domestic market is on the average of about 250,000 cubic meters of hardwood lumber.

-Export Marketing and Milling

The Export Marketing and Milling Department of MTE undertake to processes the logs and export them in log form or as processes timber. The Export Department utilizes about 370,000 cubic meters of teak logs and about 270,000 cubic meters of non-teak hard wood for logs for the export market. Annual revenue from this undertaking is roughly about US\$ 200 million from the State Sector and roughly about US\$ 50 million from the private sector including joint ventures. Export from the forestry comprises 85% in log form, 12% as rough sawn timber and 3% as value added products.

-Marketing

Timber reigns as Burma's number one export earner accounting for 25 percent of Burma total export value. Teak and hardwood logs are presently exported by monthly tender and also sold by contracts on certain occasions. Sawn timber and downstream products are mainly sold by sales contracts. Teak of high quality grades is usually sold through monthly tender, while third and fourth grades are sold through negotiations. In most sales, the foreign buyer usually makes a prepayment of 5 to 25 percent to the Myanma Timber Enterprise. The average total earnings fetched from the tender sales of teak and hard wood logs in FY 1999/2000 (March-April) was US\$ 39.09million. The average price received for teak logs was US\$ 1,237 per ton and the average price received for hard wood logs was US\$ 295 per ton. According to the official data from Myanma Timber Enterprise, 29,838 tons of teak logs, and 11,216 tons of hardwood logs were sold by tender sales in FY 1999/2000.

Exports

Export of teak logs increased by more than 39 percent during FY1999/2000 from the previous year to 379,000 cubic meters. Export of hard wood logs increased by more than 48 percent during FY 1999/2000 from the previous year to 601,000 cubic meters. Export of teak lumber decreased by more than 46 percent during FY 1999/2000 from the previous year to 16,000 cubic meters. Export of other hard wood lumber increased by 33 percent from the previous year to 691 cubic meters.

According to the Selected Monthly Economic Indicators, of the Central Statistical Organization, in CY 1999, 247,000 cubic meters of teak logs with the value of US\$ 181.95* (million) and 334,000 cubic meters of hardwood logs with the value of US\$ 34.12 * (million) were exported.

Exports of Plywood and Veneer

The volume of exports was not available but the amount of export value in CY 1999 was Kyat 86.5 million (US\$ 14.42 million*).

Note: *Exports are valued at the official exchange rate of Kyat 6 is equivalent to US\$1.00.

Sales System of Teak and Other Hardwoods

-Tenders.

Those wishing to buy teak may participate in MTE's monthly tender and sealed tender sales on FOB basis. Submittance of earnest money of US\$ 15,000 is necessary. This amount will be sufficient for all tender sales and sealed tender (quotation) sales to be held during the month. Earnest money must be in a stand by L.C. form. For areas where stand-by L.C's are not convenient, bank guarantees will be accepted. Validity will be minimum four months and Telex transfers or cash deposits are not accepted. New bidders are required to produce their company registration, list of the Board of Directors, and authorized signatory, and bank references. MTE uses a quite variety of L.C's as listed below:

Earnest Money L.C's Ground Rent L.C's

Normal L.C's allowing payment after shipment

L.C's allowing payment against ready accepted cargo. (PAAI.,C's)

-Average Export Prices.

Export prices for teak varies widely from grade to grade and also from specification to specification. Depending upon the quality and specification, teak scantlings are sold at US\$ 1,000 to US\$ 2,800 per ton (or 1.416 cubic meters), while the higher priced decks fetch up to US\$ 3,000 to US\$ 5,200 per hoppus ton(or 1.8 cubic meters), while the sawing quality teak logs sell for US\$ 950 to U\$ 2,000 per hoppus ton.

-Production of Teak and Hard wood

PSD Table

Country: Burma

Commodity: Teak Logs (000 CUBIC METERS)

	19	98/99	19	99/2000	2	000/2001
	Old	New	Old	New	Old	New
Market Year Begin						
Beginning Stocks	176	176	196	196	172	
Others*	7	7	0	0	0	
Production	454	454	470	470	475	
Imports	0	0	0	0	0	
TOTAL SUPPLY	637	637	666	666	647	
Exports	273	273	379	379	385	
Domestic Consumption	168	168	116	116	115	
Ending Stocks	196	196	171	171	147	
TOTAL DISTRIBUTION	637	637	666	666	647	
* Others = Confiscate Source: Myanma Tim			gs from un	der water.		
PSD Table						
Country:	Burma					
Commodity:	Hard wood	Logs	(000 CUB	IC METERS)		
	19	98/99	19	99/2000	2	000/2001
	Old	New	Old	New	Old	New
Market Year Begin						
Beginning Stocks	132	132	173	173		
Others*	413	413	0	0		
Production	1560	1560	1533	1533	1550	
Imports	0	0	0		0	
TOTAL SUPPLY	1932	1932	1706	1706	1550	
Exports	405			601	600	
Domestic Consumption	1527	1527	1585			

* Others = Confiscated illegal Source: Myanma Timber Ente PSD Table Country: B Commodity:	Burma Feak Lum	nber				
* Others = Confiscated illegal Source: Myanma Timber Ente PSD Table Country: B Commodity:	Burma Feak Lum	nber	from und			
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C	T			BIC METER	.S)	
C	T					
C	Old	998/99	1	999/2000	2	000/2001
		New	Old	New	Old	New
Market Year Begin						
Beginning Stocks	19	19	16	16	9	
Production	37	37	33	33	35	
Imports	0	0	0	0	0	
TOTAL SUPPLY	56	56	49	49	46	
Exports	30	30	16	16	16	
Domestic Consumption	10	10	25	25	25	
Ending Stocks	16	16	8	8	5	
TOTAL DISTRIBUTION	56	56	49	49	46	
Source: Myanma Timber Ente	erprise					
PSD Table						
	Burma					
		rd wood Lu	mber	(000 CUBIO	C METER	S)
	1	998/99	1	999/2000	2	000/2001
C	Old	New	Old	New	Old	New
Market Year Begin						
Beginning Stocks	11	11	13	13	8	
Production Production	263	263	232	232	240	
Imports	0	0	0	0	0	
TOTAL SUPPLY	274	274	245	245	248	
Exports	0.52	0.52	0.69	0.69	1	
Domestic Consumption	260	260	236	236	235	

Ending Stocks	13	13	8	8	12	
TOTAL DISTRIBUTION	274	274	245	245	248	
Source: Myanma Timber Enterprise						

Domestic Consumption.

Myanma Timber Enterprise has the monopoly to undertake commercial exploitation of teak wood from extraction to processing and marketing in all forms. For non-teak woods, established private timber businessmen are granted a license to extract under contract. In the milling and processing of hard woods, local saw mills are issued permits for operating the mills on yearly basis.

Non-teak hard woods are produced both by the State and private sector, with the latter having the bigger share. The private sector is not allowed to handle teak sales either locally under export. Nevertheless, they are allowed to export non-teak hardwood logs, lumber, and finished products. In the non-teak hardwood sector, about 900,000 cubic meters of logs are sawn for use as construction timber and railway sleepers. Approximately 197,000 cubic meters are used by downstream industries.

Production and Distribution of Teak/ Hardwood Logs (cubic meter)

Teak Logs

Particulars	1997/98	1998/99	1999/2000
Beginning Stocks	175,985	175,723	195,557
Others*	2,311	6748	0
Production	431,039	454,084	470,365
Total Supply	609,335	636,555	665,922
Distribution	433,612	440,998	494,466
- Saw Mills	131,945	109,997	86,486
- Local Sales	4,304	14,329	28,939
- Export	219,804	272,739	379,016
- Others	77,559	43,933	25

Stock	175,723	195,557	171,456

Others* = Salvaged logs from under water/confiscated illegal logs Source: Myanma Timber Enterprise.

Other Hardwood Logs

Particulars	1997/98	1998/99	1999/2000
Beginning Stocks	171,461	132,045	172,551
Others*	221,651	412,522	0
Production	1,493,153	1,559,768	1,533,192
Total Supply	1,886,265	2,104,335	1,705,743
Distribution	1754,420	1,931,784	2,185,857
- Saw Mills	653,487	602,878	532,618
- Local Sales	603,615	585,425	604,082
- Export	263,817	404,884	601,185
- Others	233,501	338,597	447,972
Stock	132,045	172,551	(-)480,114

^{*} Others= Confiscated illegal logs/ salvaged logs from under water.

Production and Distribution of Lumber (Cubic meter)

Teak

Particulars	1997/98	1998/99	1999/2000
Beginning Stocks	16,176	19,089	16,179
Production	44,234	37,034	33,346
Total Supply	60,410	56,123	49,525
Distribution	41,321	39,944	40,896
- Saw Mills	0	0	0
- Local Sales	12,144	10,389	25,003

- Export	22,732	29,555	15,893
- Other	6,445	0	0
Stock	19,089	16,179	8,629

Source: Myanma Timber Enterprise.

Other Hardwood

Particulars	1997/98	1998/99	1999/2000
Beginning stocks	17,627	10,223	12,624
Production	283,736	262,757	232,227
Total Supply	301,363	272,980	244,851
Distribution	291,140	260,356	236,673
- Saw Mills	0	0	0
- Local Sales	279,385	253,912	235,157
- Export	2,382	518	691
- Other	9,373	5,926	825
Stock	10,223	12,624	8,178

Source: Myanma Timber Enterprise.

-Local Sales

In FY 1999/2000 there was an increase of 4 percent in the production of teak logs compared to the previous year of 454,000 cubic meters. In noting discrepancy between this figure and the AAC of 409,062 cubic meters for teak, the Forest Department says this is at least partly explained by the inclusion of confiscated logs, salvaged logs from under the water and carry-over stocks in the production figure. The difference also illustrates the problems of accurate data collection in a tightly controlled economy where the incentives to circumvent the system are compelling. Local sales of teak logs increased by 102 percent during FY 1999/2000 from the previous year to 14,000 cubic meters. Teak lumber production decreased by 10 percent during FY 1999/2000 from the previous year of 56,000 cubic meters whereas local sales for teak lumber increased by 141 percent during FY 1999/2000 from the previous year of 10,000 cubic meters. The increased sales of teak logs can be attributed to the Myanma Timber Enterprise's increased sales to the Joint Venture and Companies in which Myanma Timber Enterprise has investment shares. In these wood-based industries Myanma Timber Enterprise supplies the raw materials. The Joint Venture Companies can also lease private saw mills for milling.

The private sector and the Joint Venture Companies can also compete in the monthly tender sales of teak and hardwood logs whereas for the Joint Venture the sale prices for the logs are priced at six month average tender prices.

Local sales of other hardwood logs increased by 3 percent during FY 1999/2000 from the previous year of 585,000 cubic meters and other hardwood lumber decreased by 7 percent during FY 1999/2000 from the previous year of 254,000 cubic meters. It is rather confusing to note that the total supply of hard woods logs in FY 1999/2000 exceeds production, which post assumes will be adjusted with Others(confiscated/salvaged logs) in FY 2000/01.

Post believes that the utilization of teak logs and lumbers and other hardwood logs and lumber are much higher than official figures because the illicit trade of logs and lumber is a thriving, prosperous trade. Most of the domestic supply is provided from private saw mills and timber merchants who purchase illicit logs for milling, since Myanma Timber Enterprise has prohibited the local sale of teak lumber to private companies. The contraband products are mostly sold as lumber or value-added products such as furniture, window/door frames and doors. Most of the teak and Padauk that are smuggled out to Thai/ Chinese border areas are flooring strips, plank boards scantlings or lumber blocks. It is estimated that Forest Department's annual confiscation of teak and other hard wood logs and other products are about 10,000 cubic meters.

-Wood for fuel

In the last decade, it was estimated that the annual consumption of wood fuel per household was 1.4 cubic tons in the urban areas and 2.5 cubic tons in the rural areas. Over a span of centuries wood fuel and charcoal have led to severe depletion of forests all over the country. Forests in Ayeyarwady, Bago, Magway and Sagaing Division were severely depleted due to their easy accessibility.

Approximately out of a total of 47 million, 24% of Burma's population lives in urban areas and use either firewood or charcoal. It is estimated that charcoal accounts for 4-6 % of the total consumption of wood fuel in urban areas. In Rangoon City alone more than 50 percent of the residents use charcoal for cooking and for other commercial purposes. The main source of charcoal for Rangoon comes from the mangrove forests in the Ayeyarwady delta region, in the Ayeyarwady Division. Being a prosperous trade and in order to satisfy the huge demand, vast areas, of the mangroves in the Ayeyarwaddy division had been destroyed at an alarming rate, compelling th government to step in to stop further exploitation of this resource. To fill this vacuum, other areas on the coastal strips like the Rakhine State, and Tanintharyi divisions were exploited instead. Consumption patterns vary from area to area depending on the agro-ecological conditions, household sizes and availability of other fuel. Consumption of fuel wood is much higher in colder States such as Shan, Chin and Kachin States compared to other States and Divisions. There are now 7 States/Divisions that are fuel wood deficient and by the year 2005 the number could grow to nine. With regular and prolonged power shortages coupled with the high cost of power, expensive fuel oil such as kerosene and with no other alternative, dependence on charcoal for fuel has increased farther putting more pressure on the existing forest land. In order to lessen the utilization of fire wood and charcoal the GOB has introduced briquettes as an alternative energy source. To date there are about 30 of briquette machines installed around the

country with an annual capacity of 100,000 tons.

Impact of Asian Economic Crises on Timber prices.

Regional economic conditions have a marked effect on Burma's timber prices. The Asian economic crisis in 1997 seriously undermined the export of teak and the other hard woods of Burma in the latter half of the fiscal year 1997-98 and the first half of the fiscal year 1998-99. A reduced purchasing power automatically depressed prices. Though the situation may be said to have improved, the demand for timber has still not returned to the pre-1997 level.

Logs of considerably good quality are sold by competitive bidding in the monthly tenders sales and the lowest grade sold in the Sawing Grade 4 was SG4. Strict observation of the grading systems of logs has become essential in order to maintain price levels and special care is taken to ensure that the price level for each grade does not fluctuate widely. The minimum average price of SG4 logs is set around US\$ 1,000. In the pre 1993 period they were sold at around US\$ 650 to US\$ 830 but climbed to US\$ 1,400 in 1994. The increase in prices compelled some of the regular customers to seek substitute sources of supply from Africa and other regions where it is possible to get cheaper teak logs around US\$ 700 per hoppus ton on CIF basis. This has led to dramatically curtailed export of teak to some countries such as India and Thailand. The situation also has had an adverse influence on the annual revenue of the Myanma, Timber Enterprise(MTE).

To win back the markets, MTE introduced substitute grades that are within the reach of some of its regular buyers, an alternative grade, vis "Assorted." This grade inferior to the SG4 logs and is also cheaper with prices circa US\$ 620 to US\$ 900, averaging about US\$ 740; making it possible for the MTE to compete with African plantation teak. One advantage the MTE has over the African plantation teak was that, it's assorted logs are from natural forests that can be easily differentiate from plantation teak which have wider annual rings. Although plantation teak may not be distinguishable from natural teak when used for outdoor furniture, it will certainly lack the elegance that natural teak has when used for indoor furniture, because plantation teak is usually not matured enough.

Union of Myanmar Forest Products Joint-Venture Corporation Limited (FPJVC)

It was founded jointly by the MTE(Myanma Timber Enterprise) and the FD(Forest Department) on 30th September 1993. Subscribed shares are MTE 45%, FD10% and private companies and individuals 45% in the paid up capital of 50%.

The FPJVC receives hardwood logs, under sized logs, local use teak logs and teak tops and lops from MTE. FPJVC does most of the timber transportation work, processing and manufacturing of teak and hardwood into high quality products. It also does market of processed wood products locally and abroad; sale of teak logs, teak tops and lops through quotation and invitation of tender to local and foreign buyers.

It owned three wood--based factories that manufacture value-added wood products producing teak, hard wood conversion, parquet or molding and other commodities. Apart from that there is a 50-50 profit-sharing basis with the Chinese national Construction Machinery

Corporation(CNCMC) to manufacture traditional Chinese style furniture. This will be carried out in the name of a third sub-company "Myanmar China Hardwood Products."

The FPJVC is the sole supplier of Pyinkado sleepers to the Myanma Railways and raw materials to the private sector factories.

Trade Tables

Montly Export of Teak in 1999

Month	Quantity ('000 Cubic Meter)	Value (Kyat in million)
January	14.4	78.9
February	34.9	131.7
March	32.3	142.4
April	10.3	59.5
May	23.3	90.4
June	22.3	91.4
July	14.5	70.8
August	24.1	79.4
September	12.5	83.8
October	13.6	68.8
November	25.3	102.6
December	19.4	92.0
Total	246.9	1091.70 (US\$ 181.95 million)

Source: Selected Monthly Economic Indicators.

Exports are valued at the official exchange rate of Kyat 6 is equivalent to US\$1.00

Montly Export of Hardwood in 1999

Month	Quantity ('000 Cubic Meter)	Value (Kyat in million)

January	11.0	9.3
February	22.5	12.0
March	42.7	24.5
April	29.5	16.6
May	28.9	12.4
June	25.0	16.2
July	35.7	21.1
August	27.3	17.3
September	12.7	9.4
October	29.0	20.1
November	53.2	28.3
December	16.7	17.5
Total	334.2	204.7 (US\$ 34.12 million)

Source: Selected Monthly Economic Indicators.

Exports are valued at the official exchange rate of Kyat 6 is equivalent to US\$1.00

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Earnings and Average Prices for Tender Sales in 1996-97 to 1999-2000 (in US dollars)

Tender No	T/96-97 12 tenders avg.	T/97-98 11 tenders avg.	T/98-99 12 tenders avg.	T/99-2000 11 tenders avg.
Total Earnings US\$M	141.32	72.82	47.07	39.09
Teak logs sold (ton)	94,934	48,705	29,043	29,838
Teak logs avg.prices	1,233	1,277	1,300	1,237
(a) 2 nd qlty.avg.	5,200			
(b). 3rd qlty. avg.	3,675	3,632	3,188	3,715
(c) 4th qlty. avg.	2,915	3,005	2,915	3,175
(d) SG 1.avg	2,026	2,015	2,235	2,400
(e) SG 2.avg	1,597	1,508	1,638	1,796
(f) SG 3.avg.	1,032	987		
(g) SG4.avg.	1,050	1,022	987	1,060
(h) Short logs				
Hard wood logs sold (ton)	68,955	41,972	45,064	11,216
Hard wood logs avg.prices US\$	366	311	240	295
(a) Padauk				
-2 nd avg	1,415	2,105		
-3 rd avg	1,298	1,656	1,255	
-4 th avg.	1,168	1,063	738	711
-Assorted avg.	847	755	521	421
-Padauk Square	1,205	1,224	637	480

B. Pyinkado avg.	354	277	224	244
C. Gurjan avg.	273	236	177	144
D. Taukkyan avg.	231		196	105
E. Ingyin avg.			175	133
F. Hnaw avg.	398	369	279	278
G. Thinwin avg.	491	646	476	442
H. Tamalan avg.	1,036	1,064		
- Tamalan square	1,109	1,000		
I. Sagawa avg.	465	444	253	235
J. Yemane avg.		235	379	365
K Thingan avg.	415	307		351
L. Thitya/Ingin avg.	150			
M Pyinma avg.	327	352	171	323
N. Thitya avg.	334		232	193
O. Mixed Species avg.	100		151	
P. Thingadu avg.	167	231	151	140
Q. Myaukchaw avg.		333		
R. Taung Thayet avg.		181		
S. Binga		121		
T. Thit Kar			215	
U. Myauk Ngo			150	
		•		
Wood Base Products				

-Teak Plywood avg.	2.83		
-Teak Neneer avg.	1.63		
- Teak Flitches		3,017	

Note: Total Earnings US\$ million= inclusive of Forest JV and Private Sectors

Source: Myanmar Forestry Journal, April 2000

Teak logs Tender Sales for 1999 by Area wise Value in US\$

S	A	Janı	January		February		March		April	
r	Area	Ton	Value	Ton	Value	Ton	Value	Ton	Value	
1	EUR/UK/ USA	593	997,267	661	1,010,377	227	440,948	305	581,727	
2	HONGKONG	379	419,686	69	94,417	295	384,766	371	377,009	
3	INDIA	332	464,273	444	511,577	541	740,625			
4	JAPAN	111	235,393	93	203,402	29	75,298	23	53,218	
5	SINGAPORE	539	602,676	203	303,159	492	561,155	456	538,399	
6	THAILAND	1224	1,356,856	1689	1,735,258	909	933.255	485	507,167	
7	BURMA							34	32,323	
	TOTAL	3178	4,076,151	3160	3,858,189	2493	3,136,047	1674	2,089,843	

Source: Myanmar Forestry Journal

S		May		June		J	uly		August
r	Area	Ton	Value	Ton	Value	Ton	Value	Ton	Value
1	EUR/UK/US A	246	455,101	449	700,258	396	765,131	420	758,151
2	H'Kong			204	196,476	305	336,850	539	539,097
3	India			164	205,429	276	353,258	330	383,463
4	Japan	37	41,615			25	65,086	193	240,952
5	Singapore	126	169,291	518	634,494	475	655,566	391	514,460
6	Thailand	774	866,475	789	831,172	1,233	1,278,141	1252	1,302,377
7	Burma	270	276,432	139	143,114	292	327,462	662	696,279
	Total	1453	1,808,914	2263	2,710,942	3002	3,781,494	3787	4,434,779

Source: Myanmar Forestry Journal

S		Septem	ber	October			November		December
r	Area	Ton	Value	Ton	Value	Ton	Value	Ton	Value
1	EUR/UK/US	393	690,608	422	784,790	266	436,051	162	307,754
2	H'Kong	568	588,688	677	678,723	147	145,572	146	156,238
3	India	346	394,449	462	589,319	408	552,246	87	113,015
4	Japan	129	249,045	99	213,963	55	122,933	62	156,415
5	Singapore	207	280,570	550	692,623	52	93,761	270	388,544
6	Thailand	1,118	1,231,249	1,005	1,105,408	1,185	1,322,768	1,317	1,498,722
7	Burma	962	968,194	292	348,669	220	237,973	74	89,381
	Total	3,723	4,402,804	3,507	4,413,495	2,333	2,911,304	2,118	2,710,069

Source: Myanmar Forestry Journal

Teak Log Average Price in Tender Sales During 1999 \$(US\$)\$

SR	Particulars	January	February	March	April	May	June
1	Teak Logs avg. prices	1,290	1,235	1,258	1,248	1,245	1,206
a	3 rd Qlty. avg	-	1	1	1	1	3,406
b	4 th Qlty. avg	2,856	2,890	2,949	2,966	2,991	3,135
c	SG 1 avg.	2,198	2,325	2,355	2,494	2,296	2,370
d	SG 2 avg.	1,745	1,707	1,726	1,764	1,714	1,768
e	SG 4 avg.	1,006	968	992	1,012	1,064	1,024

SR	Particulars	July	August	September	October	November	December
1	Teak Logs avg. prices	1,270	1,177	1,198	1,272	1,248	1,279
	3 rd Qlty. avg						
	4 th Qlty. avg	3,018	2,997	3,096	3,193	3,363	3,353
	SG 1 avg.	2,346	2,224	2,353	2,430	2,537	2,418
	SG 2 avg.	1,766	1,749	1,875	1,718	1,939	1,870
	SG 4 avg.	1,068	1,038	1,047	1,090	1,103	-

Source: Myanmar Forestry Journal

Export of Forest Products(Private) during FY 1999-2000 (March-April)

Commodity	Total US\$
(1) Bamboo	150,210.75
(2) Broom	177,253.00
(3) Broom Stick	64,489.10
(4) Cane	1,361,925.27
(5) Cane Furniture	11,250.00
(6) Cutch	189,899.76
(7) Handicraft	396,580.12
(8) Hardwood Conversion	4,166,114.53
(9) Hardwood finished goods	1,428,753.37
(10) Hardwood Furniture	821,857.37
(11) Hardwood logs	454,560.01
(12) Hardwood Plywood	13,566,857.56
(13) Hardwood Scantling	1,421,675.15
(14) Ohndon Bark	64,461.00
(15) Teak Conversion	13,957,390.77
(16) Teak Furniture	5,036,552.08
(17) Teak Plywood	540,421.97
(18) Teak Logs	465,892.33
(19) Teak Veneer	37,987.46
Total	1100 44 214 121 60
Total	US\$ 44,314,131.60

Source: Myanmar Forestry Journal

Forest Plantation by Species up to 2000

Species	Area (Hectares)
Teak	294,000
Pyinkado	54,441
Padauk	15,928
Pine	17,015
Eucalyptus	76,040
Others	247,996
Total	705,420